

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|----------------------|-------------------------|------------------|
| 10/762,515 | 01/23/2004 | Jacob Mozel | 4707-001 | 5240 |
| 22429 | 7590 11/20/2006 | | EXAMINER | |
| LOWE HAUPTMAN BERNER, LLP 1700 DIAGONAL ROAD | | | FEELY, MICHAEL J | |
| SUITE 300 | | ART UNIT | PAPER NUMBER | |
| ALEXANDRI | A, VA 22314 | | 1712 | |
| | | | DATE MAILED: 11/20/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|---|---|--|--|--|--|
| | 10/762,515 | MOZEL ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Michael J. Feely | 1712 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was realiure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | · | | | |
| 1) Responsive to communication(s) filed on 08 Se | eptember 2006. | | | | |
| 2a)☐ This action is FINAL . 2b)☒ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| · | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 37-52 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 37-52 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o | vn from consideration. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11. | epted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail D. 5) Notice of Informal F 6) Other: | ate | | | |

Application/Control Number: 10/762,515

Art Unit: 1712

DETAILED ACTION

Pending Claims

Claims 37-52.

Previous Claim Objections

1. The objection to claims 1-22 has been rendered moot by the cancellation of these claims.

Previous Claim Rejections - 35 USC § 112

2. The rejection of claims 1-22 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been rendered moot by the cancellation of these claims.

Claim Interpretation

3. In claims 37-52, the recitation "ink-jet," has been given little patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In the instant case, the preamble merely recites the intended use of the liquid thermosetting ink, wherein the prior art can meet this future limitation by merely being capable of such intended use.

Application/Control Number: 10/762,515 Page 3

Art Unit: 1712

Previous Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 5. The rejection of claims 1-12 and 18-22 under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Masse et al. (US Pat. No. 5,478,885), Muroi et al. (US Pat. No. 5,480,957), and Hopper et al. (Pub. No. US 2006/0047014) has been rendered moot by the cancellation of these claims.
- 6. The rejection of claims 13 and 14 under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Masse et al. (US Pat. No. 5,478,885), Muroi et al. (US Pat. No. 5,480,957), and Hopper et al. (Pub. No. US 2006/0047014) in view of JP 63-261253 has been rendered moot by the cancellation of these claims.

Previous Allowable Subject Matter

7. The previously indicated allowability of claims 15-17 has been rendered moot by the cancellation of these claims.

Specification

8. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: instant claim 1 and originally filed claim 3 include *inorganic boron salts* in the list of curing agents. The Specification does not include these materials – see page 4, lines 19-21.

Claim Rejections - 35 USC § 112 1st paragraph

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 37-51 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The composite nature of the curing agent (see limitations of claim 52) is critical or essential to the practice of the invention, but not included in the claim(s). The omission of this essential feature is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

After a further review of the Specification, the object of the invention is only achieved by creating composite curing agent particulates (as set forth in claim 52). The formation of these composite curing agent particulates is instrumental to achieving at least one solid latent curing agent with a maximal particle size of less than 2. These materials essentially represent an alternative to the conventional size reduction steps of milling or pulverizing solid curing agents. Furthermore, these materials appear to represent the spirit and inventive concept of the instant invention. Evidence of this can be seen throughout the Specification: page 2, bottom paragraph; page 8; pages 10-11; Examples.

11. Claims 43, 45, and 46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

Art Unit: 1712

relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 43, not all of the epoxy resins set forth in claim 43 are supported by the Specification – see: page 4, lines 22-25; page 9, lines 1-5.

Regarding claim 45, not all of the impact modifiers and/or flexibilizers set forth in claim 45 are supported by the Specification – see: page 4, line 28 through page 5, line 2; page 9, lines 11-16.

<u>Regarding claim 46</u>, not all of the monomers and/or oligomers set forth in claim 46 are supported by the Specification – see: page 5, lines 5-10; page 9, lines 21-26.

Claim Rejections - 35 USC § 112 2nd paragraph

- 12. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 13. Claims 37-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 37-51 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the composite nature of the curing agent particulates.

The formation of these composite curing agent particulates is instrumental to achieving at least one solid latent curing agent with a maximal particle size of less than 2. These materials

Art Unit: 1712

essentially represent an alternative to the conventional size reduction steps of milling or pulverizing solid curing agents. Furthermore, these materials appear to represent the spirit and inventive concept of the instant invention.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 37-52 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the combined teachings claims 1-9 and Example 2 of copending Application No. 10/762,508 (US 2005/0161633). Although the conflicting claims are not identical, they are not patentably distinct from each other because the combined teachings of claim 1-9, in light of Example 2, significantly overlap the scope of the instant claims – see: In re Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970).

Application/Control Number: 10/762,515 Page 7

Art Unit: 1712

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

16. Claim 52 would be allowable if rewritten to overcome the ODP rejection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims; or rewritten to include all of the limitations of the base claim and any intervening claims with a timely filed terminal disclaimer.

Response to Arguments

17. Applicant's arguments with respect to claims 37-52 have been considered but are moot in view of the new ground(s) of rejection.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Feely Primary Examiner Art Unit 1712

November 16, 2006

MICHAEL FEELY PRIMARY EXAMINER